ABSTRACT OF THE DISCLOSURE

A method for transmission rate adaptation used in a wireless network. A current transmission rate is selected from a set of predetermined transmission rates. Each of the predetermined transmission rates, R, is associated with a PER (packet error rate) range, which includes a predetermined threshold pair of a high PER threshold, denoted as $Q_H(R)$, and a low PER threshold, denoted as $Q_L(R)$. First, calculate a first estimated PER, denoted as $P1(r_n)$, wherein r_n denotes the current transmission rate. Then, check whether the $P1(r_n)$ is larger than the $Q_H(r_n)$, if yes, reduce the transmission rate. Then, calculate a second estimated PER, denoted as $P2(r_n)$, and check whether the $P2(r_n)$ is smaller than the $Q_L(r_n)$, if yes, increase the transmission rate. And, check whether the $P2(r_n)$ being larger than the $Q_H(r_n)$, if yes, reduce the transmission rate.

* * * *